What is claimed is:

1. A cooling tower having an outside and an inside and a longitudinal axis, comprising:

an evaporative media;

a liquid distribution system that distributes hot liquid over said evaporative media;

a heat exchanger that transfers heat from a first air stream into a second air stream, said heat exchanger comprising at least one generally diamond shaped heat exchanger pack that includes a first set of passageways and a second set of passageways; and

an air current generator that directs said first air stream through said evaporative media and through said first set passageway and wherein said air current generator directs said second air stream through said second set of passageways.

2. The cooling tower according to claim 1, wherein said at least one generally diamond shaped heat exchanger pack is a plurality of generally diamond shaped heat exchanger packs, each of said plurality of generally diamond shaped heat exchanger packs having said first set of passageways and said second set of passageways,

wherein said plurality of generally diamond shaped heat exchanger packs are positioned adjacent to each other so that a portion of each of said plurality of generally diamond shaped heat exchanger packs abut one another so that said heat exchanger extends across the inside of the cooling tower to form a single tier heat exchanger.

3. The cooling tower according to claim 2, further comprising:

a first plurality of air ducts that open to the inside of the cooling tower, wherein said first plurality of air ducts connect to said first set of passageways of said plurality of generally diamond shaped heat exchanger packs; and

a second plurality of air ducts that open to the outside of the cooling tower, wherein said second plurality of air ducts connect to said second set of passageways of said plurality of generally diamond shaped heat exchanger packs.

4. The cooling tower according to claim 3, wherein said first plurality of air ducts each comprise side portions, and wherein said second plurality of air ducts each comprise side portions and base portions, wherein said base portions are angled generally downwardly away from the longitudinal axis of the cooling tower.

5. The cooling tower according to claim 1, further comprising a reservoir that captures water condensed out of said first air stream.

6. The cooling tower according to claim 1, wherein said evaporative media is counterflow evaporative media.

7. The cooling tower according to claim 1, wherein said evaporative media is crossflow evaporative media.

8. The cooling tower according to claim 1, further comprising a drift eliminator disposed above said evaporative media.

9. The cooling tower according to claim 1, further comprising a set of doors that control air flow through said first set of air passageways.

10. The cooling tower according to claim 1, further comprising a set of doors that control air flow through said second set of air passageways.

11. The cooling tower according to claim 1, further comprising:

a first set of doors that control air flow through said first set of air passageways; and

a second set of doors that control air flow through said second set of air passageways..

12. The cooling tower according to claim 1, wherein said liquid distribution system comprises a plurality of nozzles that distribute hot water over said evaporative media.

13. The cooling tower according to claim 1, wherein said first passageway and said second passageway are formed by sandwiching thin sheets together.

14. The cooling tower of claim 13, further comprising positively raised edges along two parallel edges of the thin sheet material and negatively raised edges along the two parallel edges of the thin sheets perpendicular to the edges having the positively raised edges;

said first passageway being formed by reversing two sheets and bonding the positively raised edges on one side together and the positively raised edges on the other side together; and

said second passageways being formed by reversing two sheets and bonding the negatively raised edges on one side together and the negatively raised edges on the other side together.

15. The cooling tower of claim 14, wherein said first passageways are oriented perpendicular to said second passageways by alternately bonding the negatively raised edges and the positively raised edges in a set of thin sheets.

16. The cooling tower of claim 15, further comprising positively and negatively formed buttons in the thin sheets for maintaining the passageways open under differential pressure between said first passageways and said second passageways.

17. The cooling tower according to claim 16, wherein the positively formed buttons on a first sheet press against the positively formed buttons on a first adjacent sheet and the negatively formed buttons press against the negatively formed buttons on a second adjacent sheet.

18. The cooling tower according to claim 17, wherein the positively formed buttons are configured to reduce resistance to flow of the first air stream in a first direction and the negatively formed buttons are configured to reduce resistance to flow of the second air stream in a second direction.

19. The cooling tower according to claim 13, wherein said thin sheets are made of a synthetic resin film.

20. The cooling tower according to claim 13, wherein said thin sheets are made of polyvinyl chloride (PVC).

21. The cooling tower according to claim 1, wherein said plurality of diamond shaped heat exchanger packs are positioned adjacent to one another along the longitudinal axis to form a two-tier heat exchanger.

22. The cooling tower according to claim 2, further comprising a sealing means that seals the abutting portions of the plurality of heat exchanger packs.

23. The cooling tower according to claim 1, wherein said air current generator is a fan.

24. A method for reducing the heat content of an air stream, comprising:

directing a first air stream through a first set of passageways of a generally diamond shaped heat exchanger;

directing a second air stream through a separate, second set of passageways of the generally diamond shaped heat exchanger; and

transferring heat from said first air stream into said second air stream.

25. The method according to claim 24, further comprising:

condensing water out of the first air stream; and

capturing the water condensed out the first air stream in a reservoir.

26. An apparatus for reducing the heat content of an air stream, comprising:

means for directing a first air stream through a first set of passageways of a generally diamond shaped heat exchanger;

means for directing a second air stream through a separate, second set of passageways of the generally diamond shaped heat exchanger; and

means for transferring heat from said first air stream into said second air stream.